

*Attorney docket GOT 172***IN THE CLAIMS**

1-8 (canceled)

9. (currently amended): The system according to claim 8,

An evaluation system for vehicle operating conditions, comprising:  
an automatic control device which sets target vehicle operating conditions and controls  
the vehicle so as to achieve the target operating conditions;  
a controller that functions to:  
determine whether an operation that worsens fuel economy has been performed based on  
the operating conditions of the vehicle;  
determine the operating state of the automatic control device based on the operating  
conditions of the vehicle; and  
compute an excess fuel consumption which is a fuel amount consumed in excess by the  
operation that worsens the fuel economy based on the operating conditions of the vehicle and the  
operating state of the automatic control device, and  
a display device which displays the computed excess fuel consumption;  
wherein the controller further functions to:  
compute an assumed fuel consumption based on the assumption that the operation that  
worsens the fuel economy has not been performed; and  
subtract the assumed fuel consumption from an actual fuel consumption to compute the  
excess fuel consumption;  
wherein the automatic control device is an automatic transmission comprising a torque  
converter, and the controller further functions to detect the operating state of the automatic  
transmission based on an input/output rotational speed ratio, which is the ratio between a  
rotational speed of the engine and an output rotational speed of the torque converter;  
wherein the controller further functions to:

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calculate a torque ratio and a power transmission efficiency of the torque converter from the input/output rotational speed and characteristics of the torque converter; and

compute the fuel amount consumed in excess by the slippage of the torque converter based on the torque ratio and the power transmission efficiency of the torque converter; and  
wherein the controller further functions to:

compute a fuel consumption ratio and a torque of the engine based on the rotational speed of the engine, either one of an accelerator operation amount and a value equivalent to the accelerator operation amount, and characteristics of the engine;

compute an output of the engine from the torque and the rotational speed of the engine;

compute fuel consumption from the fuel consumption ratio and the output of the engine;

and

compute the fuel amount consumed in excess by the slippage of the torque converter from the fuel consumption and the fuel amount that is obtained by multiplying the fuel consumption ratio by the work ratio at which the vehicle runs against resistance.

10. (currently amended): The system according to claim 7,

An evaluation system for vehicle operating conditions, comprising:  
an automatic control device which sets target vehicle operating conditions and controls  
the vehicle so as to achieve the target operating conditions;

a controller that functions to:

determine whether an operation that worsens fuel economy has been performed based on  
the operating conditions of the vehicle;

determine the operating state of the automatic control device based on the operating  
conditions of the vehicle; and

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compute an excess fuel consumption which is a fuel amount consumed in excess by the operation that worsens the fuel economy based on the operating conditions of the vehicle and the operating state of the automatic control device, and

a display device which displays the computed excess fuel consumption;  
wherein the controller further functions to:

compute an assumed fuel consumption based on the assumption that the operation that worsens the fuel economy has not been performed; and

subtract the assumed fuel consumption from an actual fuel consumption to compute the excess fuel consumption;

wherein the automatic control device is an automatic transmission comprising a torque converter, and the controller further functions to detect the operating state of the automatic transmission based on an input/output rotational speed ratio, which is the ratio between a rotational speed of the engine and an output rotational speed of the torque converter;

wherein the controller further functions to:

determine that the automatic transmission is in a lockup state when the actual rotational speed of the engine and the rotational speed of the engine calculated from the speed ratio and the rotational speed of the driving axle or driving wheel are equal to each other; and

when the automatic transmission is in a lockup state, compute the power transmission efficiency and the input/output rotational speed ratio of the torque converter to be both 1.

11. (canceled)